Results 107 patients received 3wC (n=31) or 3wCP (n=76, 2 receiving 3wC with weekly paclitaxel). Patients treated with 3wC rather than 3wCP were older ((median age 83 vs. 75 (p<0.001)) with more comorbidities (median CCI 4 vs. 3 (p<0.001)). Treatment was discontinued for 4 of the 31 (13%) 3wC patients and 6 of the 76 (8%) patients who received 3wCP, with death and disease progression the most common reasons for discontinuation respectively, although the difference in discontinuation rate was not significant (p>0.05). Dose reductions occurred in 16% (5/31) of patients who received 3wC and 57% (43/76) of patients treated with 3wCP, most commonly due to haematological toxicity and peripheral neuropathy respectively.

Conclusion In spite of the limitations of our retrospective analysis, 3wCP appears as feasible as 3wC monotherapy for frail ≥70 yo FIGO stage III/IV OC patients, in keeping with the EWOC-1 data, and should be considered in this cohort given that it has been shown to achieve better survival outcomes. Toxicity profiles differ and dose reductions may be required in each treatment arm.

Introduction/Background Ovarian cancer is a common malignancy associated with poor outcomes. The tumour microenvironment (TME) has been shown to be important in tumorigenesis and prognosis. Tumour associated macrophages (TAM) are the most abundant type of immune cells in TME. Dependent on stimuli, TAM may become anti-tumorigenic (M1-type) or pro-tumorigenic M2-type (CD163+). The significance of TAM in young women with ovarian tumours has not been previously established. We aimed to characterise the TAM in the TME of both borderline (BOT) and malignant ovarian tumours in young women.

Methodology Patients under the age of 50, who underwent surgical management for borderline or malignant ovarian tumours at a large tertiary UK institution in 2010–2015 were included. Full clinical, pathological and outcome data were collected. Primary tumour sections were reviewed and immuno-oncology Biomarker Working Group guidelines. Per- treatment cohorts were applied immunohistochemically to pathological samples of the patients and the expression status of these markers, relationship between clinical-pathological features and prognosis were analyzed by statistical methods.

Results In all patients in the low grade serous ovarian cancer and clear cell carcinoma groups MUC1 stained strongly positive. The frequency of MUC1 positive staining was lower in mucinous carcinoma; but it was observed that in high grade serous ovarian cancer it was higher (p<0.01). Half of the mucinous carcinoma group HER2neu stained strongly positive. In the high grade serous ovarian cancer pathology group who were resistant to platinum therapy estrogen receptor was found to be positive in all 16 patients.

Conclusion High positive staining of MUC1 was determined in low grade serous ovarian cancer and clear cell carcinoma group patients. The higher estrogen-progesterone receptor expressions in platinum resistant patients in high grade serous ovarian cancer group, the detection of HER2neu positivity in half of the population in the mucinous carcinoma group is an important result of this study. For targeted therapy results should be taken into account in these epithelial ovarian cancers which are difficult to manage.